

The Plot™

The news letter for ZEH software users

Issue 31 – Winter 2004

Welcome to Issue 31 of The Plot. Another year passes and hopefully lots of successful plots have been output by your ZEH installation. The coming year should see some exciting new products, so please check our company web page for new developments. If you have any information you would like to share with other ZEH users, please let us know and we will include it in future copies of The Plot.

We would like to take this opportunity to wish our many ZEH customers around the world a peaceful, prosperous, and healthy New Year. We look forward to working with you all in 2005.

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Events in 2005

We hope you find time to drop by the booth and see what ZEH has to offer for your site!

March	7-9	Houston, Tx	2005 Petroleum User Group Conference
May	16-19	Calgary, Alberta, Canada	CSEG National Convention
July	25-29	San Diego, Ca	Twenty-Fifth Annual ESRI International User Conference

Meet the Team — Robert Fitzpatrick

In this issue of *The Plot*, you get to meet one of the U.S. based support representatives, Robert Fitzpatrick. Robert joined the ZEH team in February 1999. One of Robert's many roles at ZEH is supporting Landmark Graphics and GeoQuest staff as well as other customers. He feels fortunate to be able to help others use ZEH products to their fullest capacity and works to improve the products at the same time.

His prior experience comes from 21 years of drafting for oil companies. Most of that time was spent at BP using various CAD applications, including MicroStation and ZEH CGMage Builder. Robert watched the computer industry grow in the oil patch from propriety seismic processing only, to complete full-featured industry standard applications like Landmark Graphics and GeoQuest. With the computer generating seismic shot point base maps faster than drawing the maps by hand, one shot point at a time, the drafting industry changed forever.



Robert grew up in Houston and married a native Houstonian. Together they have three children, girls ages 17 and 15, and a son age 12. At home Robert enjoys do-it-yourself projects and raising his three children in a Christian family atmosphere. As a family the Fitzpatricks enjoy going to church, camping, and their family vacations.

Released this Year

PLOT EXPRESS Version 4.6.0

In September 2004, ZEH released PLOT EXPRESS Version 4.6.0 which includes the following:

- Added support for Red Hat Linux (vs. 3).
- Added support for iSys iTerra Pro printers.
- Added support for HP 100, 120, and 130 printers.
- Improved interfaces, accounting, rasterizers, and interpreters.
- Added a configurable option that cancels jobs taking longer than a predefined amount of time.
- Changed Color Management licensing making color management a part of the base PLOT EXPRESS product.

For more information, view the flyer at http://www.zehsoftware.com/theplot/Whats_New_0704.pdf.

PLOT EXPRESS Version 4.5.0

Earlier this year, ZEH released PLOT EXPRESS Version 4.5.0 which includes the following:

- Added options when printing to PostScript-enabled small format devices.
- Added Active Directory authentication for ZEH users.
- Improved speed and reliability when processing HP-GL and HP-GL/2 files.
- Added support for processing PNG files.
- New printer utilization tracking when submitting from Windows-based applications.*
- Improved flexibility when printing from Windows applications through ZEH.*
- Streamlined submitting, searching, and navigation in ZEH Image Publisher.*

* Note: Some improvements were made to the add-on products to PLOT EXPRESS. These add-ons include EnterPrize and ZEH Image Publisher. Please contact your ZEH sales representative if you have questions concerning the products included in your license agreement.

For more information, visit the web at http://www.zeh.com/pdf/Whats_New45.pdf.

CGMage Builder

A new version of CGMage Builder is now available! This version supports Red Hat Linux 3, 7.1, 7.2, 7.3 (using the 2.4.x kernel) as well as support for 24-bit displays. If you are current on maintenance and would like to upgrade your existing CGMage Builder installation, please contact ZEH Technical Support. For more information on CGMage Builder, see its brochure at <http://www.zeh.com/pdf/cgmageblldr.pdf>.

MicroStation V8 Support

Earlier this year, ZEH released a MicroStation submittal tool (MSUB) supporting Microstation v8. This tool includes the following:

- Added support for MicroStation v8.
- Added a more intelligent interface directly to the main print server.
- Added printer accesses via the MySQL database.
- Improved access to some of the advanced features of the printers, such as **Print Quality** or **Roll Number**.
- No transfer costs for all maintenance paying customers of the old v7 submittal tool (ZPS-ZDFS).

For all customers having legacy v7 data, we have released a conversion tool to aid in your migration to v8. This conversion tool will convert the Level Definition as used in ZDFS to a ZOR table as now used within MSUB, or convert your file to a true WYSIWYG (What You See Is What You Get) file. Again, if you are interested in this conversion tool, our contact information is on the last page of *The Plot*.

ZEH GIS Submittal

ZEH released several versions of ZEH GIS Submittal, the latest version being 2.2.1 which includes the following:

- Full support for ArcGIS 9 in Version 2.2.1. GSUB Version 2.2.0 runs under ArcGIS 9, but is not as efficient and large file sets may not print completely.
- Added support for tracking printing expenses by user and/or department.
- Support for PS level II output only and RLE or No compression. These values were selected due to the reliability of the postscript output coming from ArcGIS.
- As of Version 2.2.0, added support for Windows 2003 Server.

ZEHServer Version 1.14

ZEH released ZEHServer Version 1.14 for use with Dassault Systemes CATIA® V5 Software. Among other enhancements, the new release includes:

- Support for HP DesignJet 100, 120, and 130 printers. This feature requires PLOT EXPRESS 4.6.0 or higher.
- Support for reading the PPD information for PostScript (PSTO) devices. This enables advanced printing features such as tray selection. Also, the list of paper sizes are read from the PPD file and are therefore printer specific.
- Cosmetic improvements to the Printer Setup dialog.
- Automatic connection to the next server in the list when the current server is down. This behavior occurs in the Print dialog.

Success Stories

ZEH accumulates stories of customer successes using our various products. Below is a short synopsis of the latest stories with a link to the complete story. Additional synopses can be found at <http://gis.zeh.com/gissuccess.html>.

If you have a success story you would like to share with other ZEH customers, please let us know. We will interview you and also write the story. All it requires is a few minutes of your time.

Department of the Municipality of Anchorage (MOA)

MOA supports users, such as the police and wildlife, that are spread out geographically throughout Anchorage. With ZEHPlot for Workgroups, the MOA experienced a two-thirds time reduction in printing, which allowed them to print 25 trail maps in one day. For the complete story, see <http://gis.zeh.com/pdf/MOA.pdf>.

Washington Department of Fish & Wildlife (WDFW)

WDFW manages the fish, wildlife (including endangered species), and the acreages that provide habitat and migration routes to the wild species. With ZEH software, the WDFW was able to centralize UNIX and Windows processing and management on the same server and to track which programs/users were consuming resources. For the complete story, see <http://gis.zeh.com/pdf/WDFW.pdf>.

ZEH Customer Care Program

The customer support team at ZEH has been conducting rigorous customer care contacts with current maintenance clients. As a part of the customer care program, clients are contacted to check on their ZEH software status, update them on new releases, and generally check in with the ZEH users to see how they are doing.

Clients are contacted either by phone or email (or both). Therefore, if you receive a call from any of our support representatives, please let them know how you are doing and feel free to question them about any new developments with the ZEH suite of software.

The Plot Delivered to Your E-Door

If you regularly pass *The Plot* to your co-workers and wish they had their own subscriptions, pass this along instead. They can now sign up for their own copies of *The Plot* on the ZEH web site at:

http://www.zeh.com/newsletter_request.html

You can also remove yourself from our newsletter mailing list by going to the same URL or sending a request to [**press@zeh.com**](mailto:press@zeh.com).

Software Installations and Training

Do you find it difficult to find the time to upgrade your ZEH installation, or are you perhaps not comfortable attempting the process yourself?

If so, perhaps **we can help**.

The ZEH Customer Support team can provide the expertise and time to upgrade your system for you, plus work with both the site administrator and users to ensure the system functions the way you need it to. We can also ensure users are aware of new features and enhancements to the installation.

We can perform one-on-one training and cater for your unique needs, or we can train groups of users on specific areas of interest.

If you would like to find out more about what we can offer, and would like price information for site visits, then please contact your nearest ZEH Customer Support team or your ZEH Account Manager who will be happy to discuss our services with you.

ZEH Training Courses

ZEH is pleased to offer a number of training courses at our US office in Houston and also in the UK office in Dorking (near London). A number of different courses are currently available, as detailed below.

Many training courses can also be provided at your site, if required.

We are always happy to discuss the specific training needs of your company and, where necessary, tailor the courses to those needs. Courses at our training facilities in Houston and Dorking are kept small to ensure each delegate receives individual attention.

For more details on each of the training courses, please visit our Web site at

<http://www.zeh.com/training/>

or contact your nearest ZEH office for more details.

Training Course List

Western Hemisphere - Houston Office

Installation and Basic Users Workshop. New to ZEH software? This workshop gets you up and printing — and in control of the system — in less than a day.

Basic Users' Course. How to produce the standard and customized prints you want.

CGM Workshop. Everything you need to know about the CGM format, including how to print its files.

Printing from MicroStation. Takes advantage of special ZEH features when printing from MicroStation 95.

Plot Express Administrator Workshop. Is administering the printing system still daunting after a few months of working with it? This workshop can help.

CGMage Builder Course. Understand the basics of montaging with ZEH's CGMage Builder. Advanced topics are also covered.

QuickScope: Analyzing CGM Files with ZCQS. See inside your CGMs.

Eastern Hemisphere - Dorking Office

ZEH UNIX PLOT EXPRESS 4 System Managers/ZEH Windows PLOT EXPRESS 4 System Managers. Understand, install, and configure PLOT EXPRESS 4.x on your system.

Using CGM in the ZEH Environment. Need a refresher course in CGM? This class teaches you about VDC extents and viewports, and how to use them to get a terrific print, among other topics.

CGMage Builder Workshop. Understand the basics of montaging with ZEH's CGMage Builder.

File Translations Using PLOT EXPRESS. Whether converting from or to CGM, DGN, HP-GL, and PostScript, this class can help you work through color and font issues.

MicroStation Printing using ZEH (Beginners, Advanced, or Combined). MicroStation users at any level can benefit from this course geared specifically toward use of ZEH Design File Submittal.

How To's

Over the years we have covered a multitude of topics in *The Plot* and for new customers it is understandably very difficult to know if we have perhaps touched on a topic before. What we will try and do here and in future issues is to ask a variety of fairly typical questions that we are asked in the Customer Support group. We will either point you to previous articles or just provide a few hints and tips to help you resolve a specific issue.

How Do I Point to More Than One FLEXlm License File?

A few customers asked how to reference more than one license file when having different applications running discreet FLEXlm licenses. To point to more than one file or different license servers, separate the license references by a colon in UNIX and a semicolon in Windows.

For example, on UNIX the LM_LICENSE_FILE variable may point to:

```
7754@server1:7740@server2
```

On a Windows system it may be:

```
7754@server1;G:\Security\GGXLIC.DAT
```

However, it is not always as simple as this and over the last few months we have seen cases on Windows installations that do not conform to the above rules. For example, the simple semicolon as a separator on Windows has not always worked. We had to use a semicolon and comma (;,) combination or include a space before the semicolon.

On sites running ERSI applications that require FLEXlm, we had to define the reference to the ZEH license file before the ERSI license file.

So please bear in mind that even though in theory the license file separator should be a simple single character, you may have to experiment with slightly more complex combinations if the licenses are not checked out correctly.

Can I Change the ZEH Web Interface Automatic Log Off?

With more users now using ZEH's Web Interface, some customers are asking how they can alter the time period so they are not automatically logged off quite so quickly. The good news is this setting can be changed. To increase the time before you are automatically logged off:

1. Make a backup copy of the file first. The file used for making the change is:
 - UNIX – \$ZEHHOME/apache/jserv/etc/zone.properties
 - Windows – %ZEHHOME%\apache\jserv\etc\zone.properties
2. Open the file in a text editor.

3. Search the file on **session.timeout**.

Notice that the value is set to 1800000. This is the millisecond value for 30 minutes.

4. Enter a number in milliseconds representing the length of time before the Web Interface should automatically log out users.

For example, if you want the log off to be after 1 hour, alter the value to 3600000.

5. Save and exit the file.

Once changed, it is not necessary to restart apache for this change to take effect.

Can I See Which Client Node and User are Using the CGMage Builder?

The CGMage Builder is primarily a UNIX and Linux application for montaging CGM files. Most sites using the application have a limited number of licenses and usually more users than available licenses. This can cause problems if a user attempts to use the application and all the licenses are checked out. However, the licenses may not necessarily be in use at that time. It is all too easy to log onto a system, open an application, and then forget to terminate it when finished, or perhaps decided to work on another workstation but not terminated the original session. Whatever the circumstances, the net result is that a license is checked out and was not checked back to make it available for other users.

In a large organization, trying to physically find the offending user and machine may not be simple. So what can be done to pinpoint who currently has a license checked out and from which machine?

If we know this, freeing up a license may be a bit simpler. Information on license checkouts is stored in the FLEXIm *lmgd.log* file. Prior to version 4.6.0, the file resided in \$ZPSPRG/zehd/log. Since version 4.6.0, this file is now located in \$ZEHHOME/logs.

For example, the following log file shows who checked out a key and from which machine:

```
10:52:58 (zehd) OUT: "ZPS-XCMP" adoyle@dorsn2
10:53:14 (zehd) IN: "ZPS-XCMP" adoyle@dorsn2
10:59:21 (zehd) OUT: "ZPS-XCMP" zehplot@dorsn10 <<< client node
10:59:37 (zehd) IN: "ZPS-XCMP" zehplot@dorsn10
11:01:05 (zehd) OUT: "ZPS-XCMP" zehplot@dorsn10
11:01:22 (zehd) IN: "ZPS-XCMP" zehplot@dorsn10
```

You can either manually check the log file using vi or grep. If you want a dynamic display to monitor activity and know at all times who is using the application, you can use the following UNIX command:

```
tail -f lmgd.log | grep XCMP
```

The same principle can be used to check the status of other applications for which you may only have a limited number of licenses.

8 or 24 Bit Displays — What I Am Running and Can I Change the Setting?

Since Solaris 2.6, an option exists to install a 24-bit color plane for displays. As of Version 4.6.0, the CGMage Builder and CGM Previewer applications can run on either 8 or 24 bit color mode displays. However, with previous releases, if the display was set to 24 bit, the following error message displayed and the application did not run.

```
Error: Cannot find 8-bit PseudoClass visual
```

Can This Be Changed?

You can change the display settings by using the command **m64config** which can be found in `/usr/sbin`. To determine what the current settings are as root, run:

```
m64config -propt
```

The above command returns something like:

```
--- OpenWindows Configuration for /dev/fbs/m640 ---  
OWconfig: machine  
Video Mode: 1152x900x76  
Depth: 24
```

To change the screen to 8 bit mode, exit Windows and log in to the command line mode and enter:

```
m64config -res 1152x900x76 -depth 8
```

It is not necessary to reboot the server to initiate the change. The 8 bit version of the CGMage Builder and CGM Previewer should now run without any error messages.

Running Exceed in 24 Bit Mode

If you have a UNIX workstation setup for 24 bit color, and you want to run the 8 bit CGMage Builder and display it back to a PC running Exceed, you can set this up as follows:

1. Right click *Exceed* in the toolbar.
2. Select *Tools » Configuration*.
3. Select the *Video* icon.
4. Change the **Server Visual** parameter to *PseudoColor*.

To run the 24 bit CGMage Builder and display back to Exceed, setup Exceed as follows:

1. Right click *Exceed* in the toolbar.
2. Select *Tools » Configuration*.
3. Select the *Video* icon.
4. Change the **Server Visual** parameter to *TrueColor*.

Running Exceed v7.1.0.0 in 24 Bit Mode

With this version of Exceed, the setting for **Server Visual** can be found beneath *Screen Definition* and not *Video*. To check and/or change the setting:

1. Right click *Exceed* in the toolbar.
2. Select *Tools » Configuration*.
3. Select the *Screen Definition* icon.
4. On the **Screen 0** tab, change the **Server Visual** parameter to *PseudoColor*.

Running Linux in 8 Bit Display Mode

To configure Linux for 8 bit mode, you need to run the program **Xconfigurator** which can be found in `/usr/X11R6/bin`. This should be run from the console where X is not started. The utility allows the display to be set for 8 bit mode, if required for the CGMage Builder.

When using this utility, use the space bar to place an asterisks alongside the required display mode. If you do not select the mode in this manner, an error message displays when the system attempts to configure the display settings.

Once set to a valid 8 bit format, the 8 bit version of the CGMage Builder and CGM Previewer run correctly on a native Linux system.

Paneling — What Is It and Why Do I Need It?

For many users the first time they are aware of paneling is when a print panels and they were not expecting it!! In these circumstances it may not be the desired result, but there are occasions when paneling is a very useful feature; particularly when printing very large images.

What is Paneling and What Controls It?

ZPANEL, the paneling feature for PLOT EXPRESS, is a utility allowing printed output larger than the width of the printer (Y paneling) and longer than the length of the media (X paneling) to be split into "panels". These panels are then attached manually for a complete print output.

The use of paneling is determined by the following:

- Type of paneling set up.
- Whether the user submitting the job chooses to use the paneling feature.

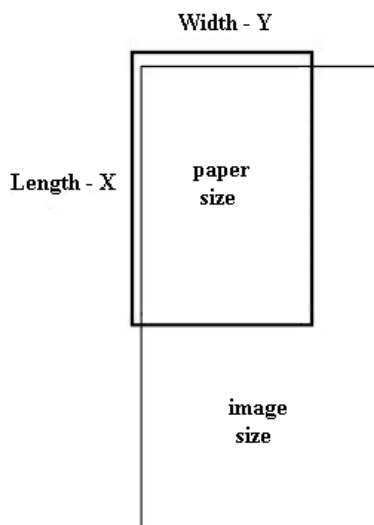
Although the system administrator can set up paneling for all print jobs, the user may opt to suppress paneling altogether.

What Types of Paneling are There?

The following are the two types of paneling:

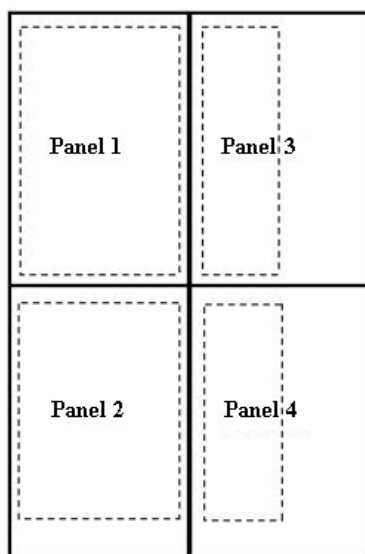
- **Full-mode paneling** – Printed output is paneled to fill the width and/or length of the printer until the last panel, which is simply the remainder. This is the default method for paneling.
- **Half-mode paneling** – Printed output is split into panels of equal size.

Assume you want to print a 12" by 20" image to an A4 paper size as illustrated below.

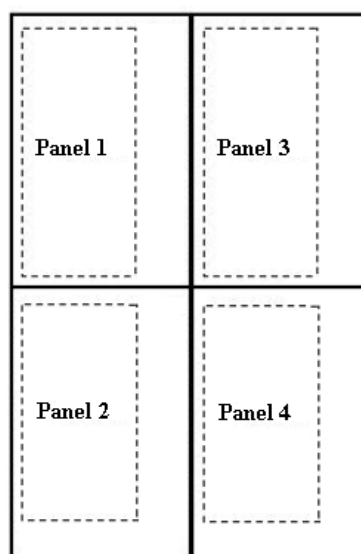


ZEH can print the image using either full-mode or half-mode paneling as follows:

Full-mode Paneling



Half-mode Paneling



Notice with half-mode paneling, only the width (Y direction) uses the half-mode paneling method.

How Does ZEH Know When to Panel?

When a printing device is configured in ZEH, two specific parameters controlling the maximum width and length that can be printed for that particular model of printer are set. These are the Bytes per Scan (width) and the Number of Scans (length).

The values set for these parameters are from database tables and are calculated based on information we know about the particular device. We take into account if the device accepts continuous rolls of media and their width, or just individual cut sheets e.g. A4, A3 etc.

What Do These Parameters Actually Mean in Layman's Terms?

To see the values set for these two parameters, use the Web Interface and select *Admin » Printers » Modify » Device*.

Bytes per Scan

The Bytes per Scan defines the maximum width that can be printed and is derived from the following equation:

$$\text{Bytes per Scan} = (\text{maximum printable width in inches} \times \text{DPI}) / 8$$

At first glance the value may not be that helpful if you are not use to the displayed numbers. However, as long as you know the Bytes per Scan, you can back calculate the maximum printable width before an image panels. For example, assume the Bytes per Scan is set to 1333 and the DPI to 300. The maximum printable width is:

$$\text{maximum printable width} = (1333 \times 8) / 300 = 35.55 \text{ inches}$$

So if an image you process has a width greater than the value set for the Bytes per Scan, it forces the output to panel.

Number of Scans

The Number of Scans defines the maximum length that can be printed and is derived from the following equation

$$\text{Number of Scans} = \text{maximum printable length} \times \text{DPI}$$

With most roll fed devices, the figure you see is usually a large value, as in theory the limit is how much paper is on the paper roll. Even the longest well logs should fit onto a roll fed device, unless insufficient paper is loaded!!

A typical setting for a 300 dpi roll fed HP RTL printer is 239864. This equates to:

$$\text{maximum printable length} = 239864 / 300 = 799.5 \text{ inches} = 66.62 \text{ ft} = 20.31 \text{ m}$$

With a cut sheet device taking A4 or A3, the value for Number of Scans is not as large as it is for a roll fed device and equates to the true printable length of the configured page size.

What Can I See in the Log File to Know if a File Has Paneled?

For every job processed through ZEH, the *plotex.log* is generated. This file can be found in the *wrk\jobid* folder on Windows and in *wrk/server/jobid* on UNIX. The log file shows details as to whether a file required paneling or whether it was printed without the need for any paneling.

These are the typical entries if no paneling is required:

```
%ZPANEL-I-VERSION, Copyright 2004 Zeh Software, Inc. Version 3.0.9
%ZPANEL-I-MODE, Full mode panelling
%ZPANEL-I-NOPANEL, No panelling required
%ZPS-PANEL Paneling complete
Running decision for phase 8: c2hp_disable
```

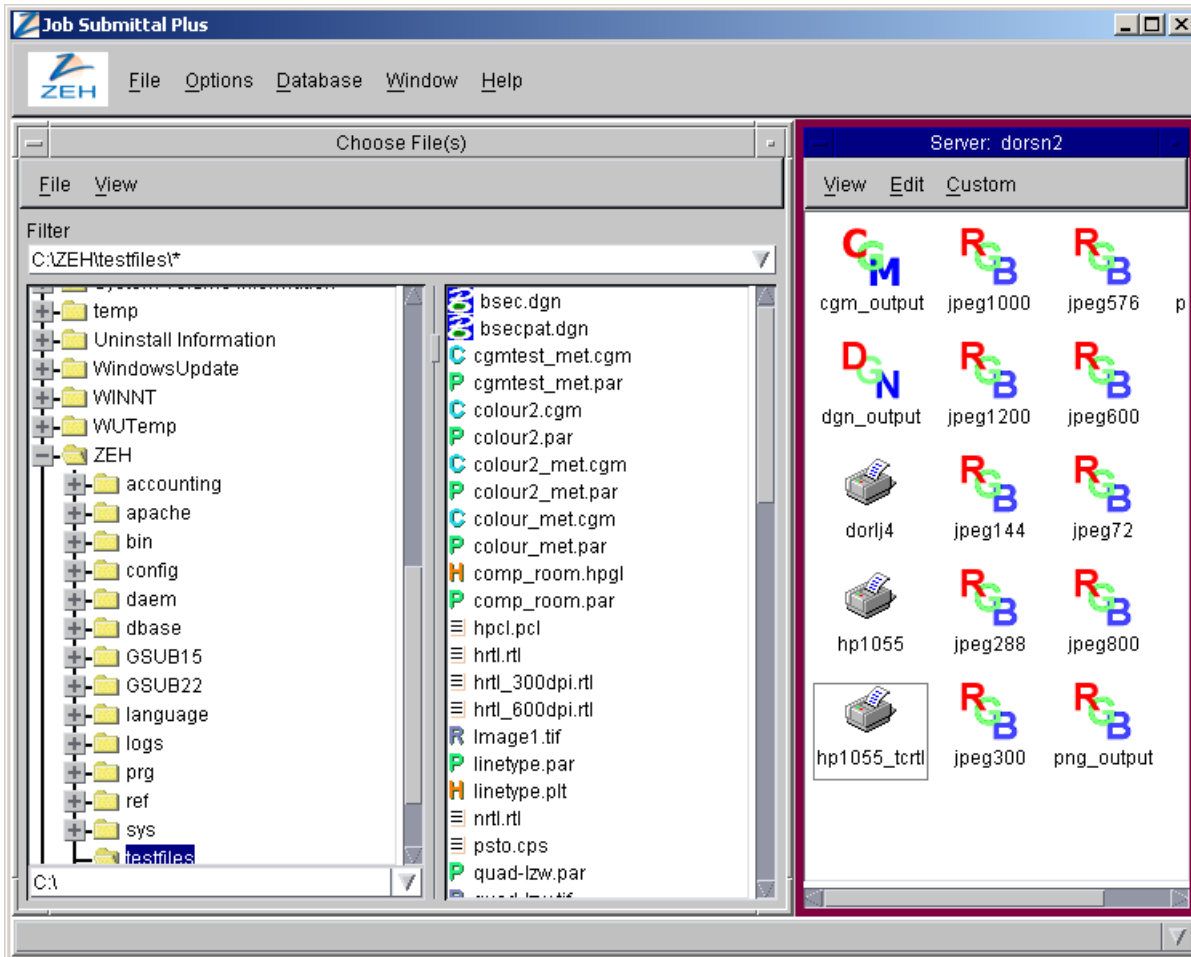
These are the typical entries if the output requires paneling. There is information to indicate if the output paneled in X, Y, or both directions.

```
%ZPANEL-I-VERSION, Copyright 2004 Zeh Software, Inc. Version 3.0.9
%ZPANEL-I-MODE, Full mode panelling
%ZPANEL-I-OVERLAP, Y overlap is 0.5 inches
    X overlap is 0 inches
%ZPANEL-I-PANEL, panelling required, number of panels = 2
%ZPANEL-I-KCOL, Finished panelling color, 2
%ZPANEL-I-KCOL, Finished panelling color, 3
%ZPANEL-I-KCOL, Finished panelling color, 4
%ZPANEL-I-NUMP, The number of Y panels is 2
    no x panelling required
%ZPANEL-I-CREATE, Creating parfiles for each of the panels.
%ZPS-PANEL Paneling complete
Running decision for phase 11: c2hp_disable
```

To find out more about paneling, please refer to Chapter 15 of the *PLOT EXPRESS System Administrator Guide*.

JSUBC – Command Line Job Submittal Plus

Hopefully, most customers are aware of the product JSUB+ either through reading about it in previous copies of *The Plot* or by using it as part of your ZEH Installation.



Are you, however, aware there is also a command line option called JSUBC. It allows you to submit through the command line without using a GUI. This option is documented in the *PLOT EXPRESS Users Guide*, "Chapter 8 - Using Job Submittal Plus Command Line", but a brief overview is given here to illustrate how to use it and how it may be able to help you.

Job Submittal Plus is a Graphical User Interface for submitting metafiles to ZEH's plot management system. Its counterpart, Job Submittal Plus Command Line, is a command line version of this same product, also allowing for submittal into ZEH's PLOT EXPRESS system. The command line version automatically installs when Job Submittal Plus is installed. The executable is named *jsubc* for UNIX and *jsubc.exe* for Windows; and is located in the bin directory where Job Submittal Plus was installed.

To run the command line option, you need to enter the following commands on one long line:

On UNIX

```
$ZEHHOME/bin/jsubc -server server_name -host hostname -port db_port_number -plotter plotter -files files_to_submit -user plotex_user -usergroup access_level -password password
```

On Windows

```
path_to_ZEHHOME\bin\jsubc.exe -server server_name -host hostname -port db_port_number -plotter plotter -files files_to_submit -user plotex_user -usergroup access_level -password password
```

The login switches are -user, -usergroup, and -password. You can enter values for these switches, or not use them and have the application display the User Login dialog.

where

-server <i>server_name</i>	The server alias used for PLOT EXPRESS. To find the server alias, cd to the \$ZEHHOME/config (or change to the %ZEHHOME%\config if running under Windows) directory and look at the db_user_address line of the <i>plotex.cfg</i> file. The name within the mysql command is the server name to use.
-host <i>hostname</i>	The actual machine name of the node where PLOT EXPRESS is installed.
-port <i>db_port_number</i>	The PLOT EXPRESS database port.
-plotter <i>plotter</i>	The name of the PLOT EXPRESS printer to submit to.
files <i>files_to_submit</i>	The file(s) to be submitted. This field does accept wildcards as well as parameter files.
-user <i>plotex_user</i>	The user name for PLOT EXPRESS. If user authentication is turned on, a valid user name must be used. If user authentication is turned off, then the user name can be anything, but not left blank.
-usergroup <i>access_level</i>	The access level (user, operator, or administrator) to use.
-password <i>password</i>	If user authentication is turned on, the password is tied to the user. If no user authentication is being used or if PLOT EXPRESS Version 4.2.5 or lower is being used, the password must be the password associated with the group (not the user). If there is no password for a group and/or user, enclose the string in quotes (- password "").

Now this may appear to be rather complex, but rest assured, it isn't that bad! The very first time you use the command line option, you need to add entries for all of the parameters. This information is then stored in the *jsubc.properties* file in the users HOME folder on UNIX and for Windows in the C:\>Documents and Settings\username\Application Data\zeh directory.

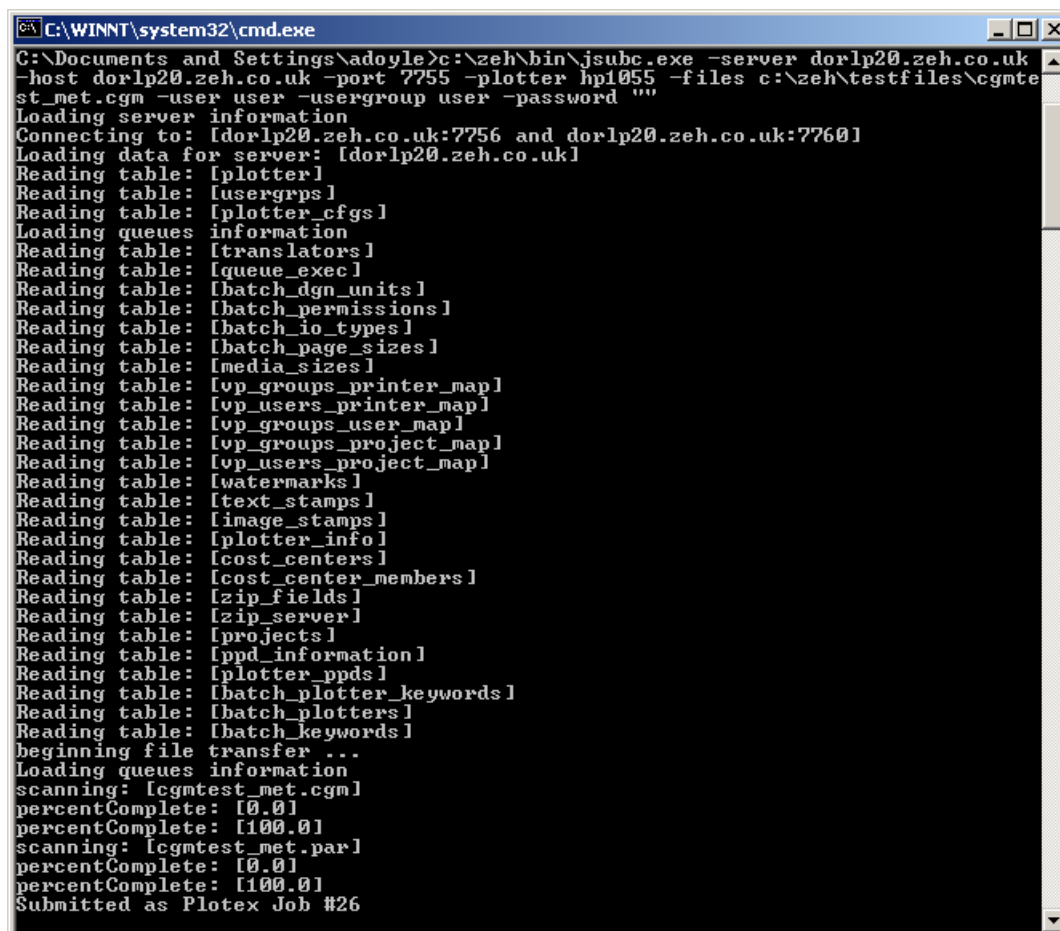
If the submittal is successful, the *jsubc.properties* file is created and contains entries like the following:

```
#Zeh Properties
#Wed Dec 01 10:22:28 GMT+00:00 2004
plotex.server=dorlp20.zeh.co.uk
plotex.plotter=hp1055
batch.database=mysql(dorlp20.zeh.co.uk:7755@plotex,user,user)
```

Once this file exists, all that should be required from that point forward is the **-files** switch.

The following images show the dialogs displayed on a typical Windows system when *jsubc* was used to submit a CGM file to an HP1055 printer.

```
C:\path>c:\zeh\bin\jsubc.exe -server dorlp20.zeh.co.uk -host dorlp20.zeh.co.uk
-port 7755 -plotter hp1055 -files c:\zeh\testfiles\cgmtest_met.cgm -user user
-usergroup user -password ""
```



```
C:\WINNT\system32\cmd.exe
C:\Documents and Settings\ad Doyle>c:\zeh\bin\jsubc.exe -server dorlp20.zeh.co.uk
-host dorlp20.zeh.co.uk -port 7755 -plotter hp1055 -files c:\zeh\testfiles\cgmt
st_met.cgm -user user -usergroup user -password ""
Loading server information
Connecting to: [dorlp20.zeh.co.uk:7756 and dorlp20.zeh.co.uk:7760]
Loading data for server: [dorlp20.zeh.co.uk]
Reading table: [plotter]
Reading table: [usergrps]
Reading table: [plotter_cfgs]
Loading queues information
Reading table: [translators]
Reading table: [queue_exec]
Reading table: [batch_dgn_units]
Reading table: [batch_permissions]
Reading table: [batch_io_types]
Reading table: [batch_page_sizes]
Reading table: [media_sizes]
Reading table: [vp_groups_printer_map]
Reading table: [vp_users_printer_map]
Reading table: [vp_groups_user_map]
Reading table: [vp_groups_project_map]
Reading table: [vp_users_project_map]
Reading table: [watermarks]
Reading table: [text_stamps]
Reading table: [image_stamps]
Reading table: [plotter_info]
Reading table: [cost_centers]
Reading table: [cost_center_members]
Reading table: [zip_fields]
Reading table: [zip_server]
Reading table: [projects]
Reading table: [ppd_information]
Reading table: [plotter_ppds]
Reading table: [batch_plotter_keywords]
Reading table: [batch_plotters]
Reading table: [batch_keywords]
beginning file transfer ...
Loading queues information
scanning: [cgmtest_met.cgm]
percentComplete: [0.0]
percentComplete: [100.0]
scanning: [cgmtest_met.par]
percentComplete: [0.0]
percentComplete: [100.0]
Submitted as Plotex Job #26
```

As the file is submitted, information displays which can be helpful if any of the input data is incorrect or if the syntax is wrong. If for example when the printer is specified with an incorrect name, you see:

```

C:\WINNT\system32\cmd.exe
C:\Documents and Settings\adoyle>c:\zeh\bin\jsubc.exe -server dorlp20.zeh.co.uk
-host dorlp20.zeh.co.uk -port 7755 -plotter hpi053 -files c:\zeh\testfiles\cgmt
st_met.cgm -user user -usergroup user -password ""
Loading server information
Connecting to: [dorlp20.zeh.co.uk:7756 and dorlp20.zeh.co.uk:7760]
Loading data for server: [dorlp20.zeh.co.uk]
Reading table: [plotter]
Reading table: [usergrps]
Reading table: [plotter_cfgs]
Loading queues information
Reading table: [translators]
Reading table: [queue_exec]
Reading table: [batch_dgn_units]
Reading table: [batch_permissions]
Reading table: [batch_io_types]
Reading table: [batch_page_sizes]
Reading table: [media_sizes]
Reading table: [vp_groups_printer_map]
Reading table: [vp_users_printer_map]
Reading table: [vp_groups_user_map]
Reading table: [vp_groups_project_map]
Reading table: [vp_users_project_map]
Reading table: [watermarks]
Reading table: [text_stamps]
Reading table: [image_stamps]
Reading table: [plotter_info]
Reading table: [cost_centers]
Reading table: [cost_center_members]
Reading table: [zip_fields]
Reading table: [zip_server]
Reading table: [projects]
Reading table: [ppd_information]
Reading table: [plotter_ppds]
Reading table: [batch_plotter_keywords]
Reading table: [batch_plotters]
Reading table: [batch_keywords]
Unable to locate plotter: [hpi053]

C:\Documents and Settings\adoyle>_

```

If the server name is specified incorrectly, the response is:

```

C:\WINNT\system32\cmd.exe
C:\Documents and Settings\adoyle>c:\zeh\bin\jsubc.exe -server dorlr20.zeh.co.uk
-host dorlr20.zeh.co.uk -port 7755 -plotter hpi053 -files c:\zeh\testfiles\cgmt
st_met.cgm -user user -usergroup user -password ""
Loading server information
Unable to establish connection to Plot Express database.

C:\Documents and Settings\adoyle>

```

After a successful submittal, the command line dialog to the same server and printer can be reduced to:

```
C:\path>c:\zesh\bin\jsubc.exe -files c:\zesh\testfiles\cgmtest_met.cgm
```

```
C:\WINNT\system32\cmd.exe
C:\Documents and Settings\ad Doyle>c:\zesh\bin\jsubc.exe -files c:\zesh\testfiles\cgmtest_met.cgm
Loading server information
Connecting to: [dorlp20.zesh.co.uk:7756 and dorlp20.zesh.co.uk:7760]
Loading data for server: [dorlp20.zesh.co.uk]
Reading table: [plotter]
Reading table: [usergrps]
Reading table: [plotter_cfgs]
Loading queues information
Reading table: [translators]
Reading table: [queue_exec]
Reading table: [batch_dgn_units]
Reading table: [batch_permissions]
Reading table: [batch_io_types]
Reading table: [batch_page_sizes]
Reading table: [media_sizes]
Reading table: [vpp_groups_printer_map]
Reading table: [vpp_users_printer_map]
Reading table: [vpp_groups_user_map]
Reading table: [vpp_groups_project_map]
Reading table: [vpp_users_project_map]
Reading table: [watermarks]
Reading table: [text_stamps]
Reading table: [image_stamps]
Reading table: [plotter_info]
Reading table: [cost_centers]
Reading table: [cost_center_members]
Reading table: [zip_fields]
Reading table: [zip_server]
Reading table: [projects]
Reading table: [ppd_information]
Reading table: [plotter_ppds]
Reading table: [batch_plotter_keywords]
Reading table: [batch_plotters]
Reading table: [batch_keywords]
beginning file transfer ...
Loading queues information
scanning: [cgmtest_met.cgm]
percentComplete: [0.0]
percentComplete: [100.0]
scanning: [cgmtest_met.par]
percentComplete: [0.0]
percentComplete: [100.0]
Submitted as Plotex Job #27
C:\Documents and Settings\ad Doyle>
```

Can I Submit Multiple Files at the Same Time?

Yes. For example, to submit all .cgm files in the current directory to the hp1055 printer using the same server as used in the previous example, use the command:

```
C:\zesh\testfiles>c:\zesh\bin\jsubc.exe -files *.cgm
```

Can I Submit a File to a Different Printer Than the One Specified in *jsubc.properties*?

Yes. To override the *jsubc.properties* setting and print to the device epon3000, use the command:

```
C:\zesh\testfiles>c:\zesh\bin\jsubc.exe -plotter epon3000 -files raster.jpg
```

Can I Use Extra ZEH Keywords?

Yes. Assume we wanted to include the keyword `cutlines=yes` when we submit a file, we can add the keyword as follows:

```
C:\zeh\testfiles>c:\zeh\bin\jsubc.exe -files testfile.cgm -cutlines yes
```

This overrides whatever the `cutlines` default settings is for the printer being used and writes `cutlines=yes` into the parameter file. If the keyword itself or its value is invalid, it does not get written to the parameter file.

Can I Add Multiple Keywords Referenced from Another File?

Yes. You can also place keyword values in a flat file (one keyword per line) and pass the file to the command line using the **-settings** switch. The command line interface writes whatever is in the file to the parameter file. The file either needs to reside in the current directory or be referenced with a full path. Assume the `c:\temp\keys.txt` file contains the follow keywords:

```
cutlines = yes
copies = no
dither_mode = poster
```

The command to use in this instance is:

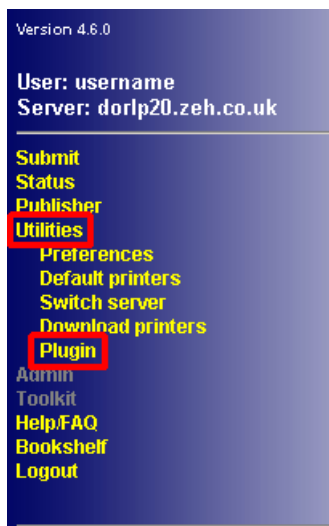
```
C:\zeh\testfiles>c:\zeh\bin\jsubc.exe -files testfile.cgm -settings c:\temp\keys.txt
```

Hopefully this gives you some ideas as to how you can use JSUBC in your environment. It is a very powerful and easy to use option and many customers are now making use of this product. If you need further information, please check out the ZEH Bookshelf or contact your local Customer Support Team.

Web Interface – How to Disable Options

Some customers have expressed a desire for certain options in the Web Interface to be disabled, so users in general cannot access certain features. In this article the technique for doing this is detailed. Please make sure you backup your original files before making any changes so you can revert back to the original setup should there be a need.

In this example we will see how we can disable access to the *Utilities » Plugin* menu.



1. Make a backup copy of the file first. The file used for making the change is:
 - UNIX – \$ZEHHOME/apache/jserv/zeh/classes/menu.en
 - Windows – %ZEHHOME%\apache\jserv\zeh\classes\menu.en
2. Open the file in a text editor.

```

menu.en - WordPad
File Edit View Insert Format Help
[Icons]
BEGIN
  MENUITEM Submit PATH Submit ACTION MPGetFile SEC 1
  POPUP Status PATH Status SEC 1
  BEGIN
    MENUITEM Devices PATH Status_Devices ACTION DeviceStatus SEC 1
    MENUITEM Queues PATH Status_Queues ACTION ShowUserQueues SEC 1
    MENUITEM Jobs PATH Status_Jobs ACTION JobTable SEC 1
    MENUITEM Printers PATH Status_Printers ACTION ShowUserPrinters SEC 1
    MENUITEM System PATH Status_System ACTION PlotexStatus SEC 5
  END
  MENUITEM Publisher PATH Publisher ACTION PublishLink LICENSE ZPS-ZPUB SEC 1
  POPUP Utilities PATH Utilities SEC 1
  BEGIN
    MENUITEM Preferences PATH Utilities_Preferences ACTION Preferences SEC 1
    MENUITEM Default printers PATH Utilities_Default+printers ACTION UserDefaultPrinters SEC 1
    MENUITEM Change password PATH Utilities_Change+password ACTION UserChangePasswd AUTH plotex_only,ldap_plotex SEC
    MENUITEM Switch server PATH Utilities_Switch+server ACTION SwitchServer SEC 1
    MENUITEM Download printers PATH Utilities_Download+printers ACTION PCPrinterDownload SEC 1
    MENUITEM Plugin PATH Utilities_Plugin ACTION Header?headerPage=PluginInstall.wm SEC 1
  END
  POPUP Admin PATH Admin SEC 5
  BEGIN

```

For Help, press F1

3. Find the 19th line which looks like:

```
MENUITEM Plugin PATH Utilities_Plugin ACTION Header?headerPage=PluginInstall.wm SEC 1
```

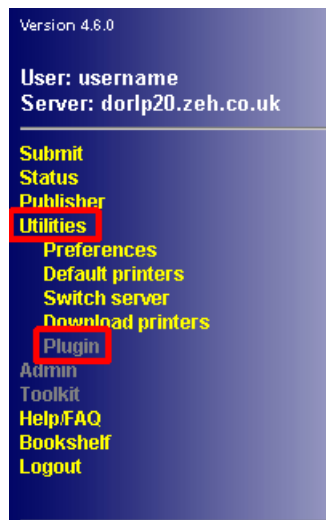
4. Change the SEC 1 parameter to denote the appropriate user access level.

You can set this level to 5 for operator access, 10 for administrator only access, or 15 to disable the option entirely for all authentication levels.

5. Save the file and exit the editor.
6. Either close and re-open, or refresh the web browser page.

You do not need to stop/restart Apache or PLOT EXPRESS for the change to take effect.

The *Utilities » Plugin* menu now appears grayed out/disabled for those users whose access level has been restricted.



This same technique can be used with any of the menu options in the Web Interface.

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